

### In the Community to Serve®

8113 W. GRANDRIDGE BLVD., KENNEWICK, WASHINGTON 99336-7166 TELEPHONE 509-734-4500 FACSIMILE 509-737-7166 www.cngc.com

April 5, 2019

Oregon Public Utility Commission 550 Capitol Street NE Salem, OR 97310-1380

Re: Revision to Rule 8 Meter Testing, Advice No. CNG/O19-04-01

Cascade Natural Gas Corporation ("Cascade") hereby encloses for filing the following proposed tariff sheets containing a requested effective date of May 6, 2019:

First Revision of Sheet No. 8.1 First Revision of Sheet No. 8.2

The purpose of this filing is to update the Rule 8 Meter Testing tariff. The reason the Company is doing this is that it would like to eliminate the need to update both the metering tariff and the Statistical Sample Program ("Program") which is referenced within the tariff itself. Both the tariff and the Program contain a lot of the same language which results in the Company having to update both the tariff and the Program whenever a change is made in either the tariff or the Program.

Also, we are changing the software used to run the Program over to what our Utility Group (Montana-Dakota Utilities, Cascade, and Intermountain Gas) currently uses. While the program philosophy is not changing, there will be some subtle changes such as the installation date vs. test date within a family of meters. However, with the randomness of results being produced, the overall testing should not change.

If you have any questions about these proposed changes, feel free to call Brett Hudson at 509-734-4573.

Sincerely,

Michael Parvinen

Director, Regulatory Affairs

Cascade Natural Gas Corporation

8113 W. Grandridge Blvd.

Kennewick, WA 99336-7166

michael.parvinen@cngc.com

Attachment

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First Revision of Sheet No. 8.1

Canceling

Original Sheet 8.1

P.U.C. OR. No. 10

# RULE 8 METER TESTING

#### **METER TEST PROCEDURES**

The maximum permissible error in the registration of meters placed in service is 2.0%. Meters shall be adjusted to register as nearly correct as practicable within the 2.0% error allowance prior to being placed in service.

(N)

(T)

(N)

Except for meters which are in the Company's statistical sampling program, the test interval for meters with capacity 3000 cubic feet per hour (cfh) will be every ten years and meters with capacity 3000 cfh and over will be every five years. The Company may elect to keep diaphragm type meters with rated capacity of up to 3,000 cfh in service for intervals beyond ten years, provided the meter performance meets the criteria of the Company's statistical sample program as approved by the Commission.

(T) (N)

All non-contaminated, testable meters will be tested in accordance with ANSI B109.1, and B109.2, using an average of the open and check in-test results to evaluate each meter's performance. Meter testing shall be performed using a company owned meter prover that is maintained in proper adjustment and so calibrated that the error of indication shall not exceed one-half (½) percent.

| (N)

### **METER SAMPLE PROGRAM**

(T)

Each meter in the Statistical Sample Program will be assigned to a meter group or "family" according to its manufacturer, meter class, and set year. At the option of the company, meters in any family may be further subdivided according to meter type, size, location, age, or other factors that may be disclosed by test data to influence the performance of the meters. Subsequently, meter families may be modified or combined as justified by the performance records.

(N)

The performance evaluation of each meter family will be based on an evaluation of test results from random sampling of the family. The random sample for each family will include meters which are removed from service on a routine basis, e.g. meters not in use, too large, too small, damaged index cover, service relocation or replacement, etc. If more meters are required for testing than have been removed from service for routine purposes, a random sample of meters within that family will be removed from service and included in the sample.

For purposes of evaluating the performance of each meter family, the analysis of the test results will exclude data on meters which are damaged, meters which do not register, meters which do not pass gas, and meters which measure either less than 90.0 percent accurate or more than 110.0 percent accurate.

(N)

(K)

(continued)

(K) Text formerly on Sheet No. 8.1 is found on Sheet No. 8.2.

(N)

First Revision of Sheet No. 8.1

**Canceling** 

P.U.C. OR. No. 10 Original Sheet 8.1

# RULE 8 METER TESTING

#### METER ACCURACY STANDARD TEST PROCEDURES

Before being installed for customer use, meters whether new or reconditioned, will be in good order and be adjusted to register correct consumption with an accuracy bandwidth of two percent (2%) fast or slow.

The maximum permissible error in the registration of meters placed in service is 2.0%. Meters shall be adjusted to register as nearly correct as practicable within the 2.0% error allowance prior to being placed in service.

Except for meters which are in the Company's statistical sampling program, the test interval for meters with capacity 3000 cubic feet per hour (cfh) will bey every gas meter will be tested at least once in a ten years—period and meters with capacity 3000 cfh and over will be every five years. The Company may elect to keep diaphragm type meters with rated capacity of up to 3,000 cfh in service for intervals beyond ten years, provided the meter performance meets the criteria of the Company's statistical sample program as approved by the Commission.

All non-contaminated, testable meters will be tested in accordance with ANSI B109.1, and B109.2, using an average of the open and check in-test results to evaluate each meter's performance. Meter testing shall be performed using a company owned meter prover that is maintained in proper adjustment and so calibrated that the error of indication shall not exceed one-half (½) percent.

#### **STATISTICAL** METER SAMPLEING PROGRAM

Except for meters which are in the Company's statistical sampling program, every gas meter will be tested at least once in a ten year period.

The Company may elect to keep diaphragm type meters with rated capacity of up to 3,000 cfh in service for intervals beyond ten years, provided the meter performance meets the criteria of the Company's statistical sample program as approved by the Commission.

Each meter in the Statistical Sample Program will be assigned to a meter group or "family" according to its manufacturer, meter class, and set year. At the option of the company, meters in any family may be further subdivided according to meter type, size, location, age, or other factors that may be disclosed by test data to influence the performance of the meters. Subsequently, meter families may be modified or combined as justified by the performance records.

The performance evaluation of each meter family will be based on an evaluation of test results from random sampling of the family. The random sample for each family will include meters which are removed from service on a routine basis, e.g. meters not in use, too large, too small, damaged index cover, service relocation or replacement, etc. If more meters are required for testing than have been removed from service for routine purposes, a random sample of meters within that family will be removed from service and included in the sample.

<u>(N)</u>

(N)

(T)

<u>(T)</u>

(N)

(N) (T)

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<u>(N)</u>

First Revision of Sheet No. 8.1

**Canceling** 

P.U.C. OR. No. 10 Original Sheet 8.2

For purposes of evaluating the performance of each meter family, the analysis of the test results will exclude data on meters which are damaged, meters which do not register, meters which do not pass gas, and meters which measure either less than 90.0 percent accurate or more than 110.0 percent accurate.

(N)

(K)

The Company's statistical sample program will meet the requirements set forth in Part IV ("In-Service Performance"), of the 1992 version of ANSI B109.1 and B109.2, and shall be based on generally accepted statistical methods within the industry for predicting the sampling distribution of the proportion of a population, with a 90% degree of confidence.

More specifically, the sampling program shall determine from a random sample of sufficient size that, nine times out of ten, as many as 80% of the meters in a meter group (population) are within the percent accuracy limits of 98.0% and 102.0% (i.e. accuracy requirement), and with no more than 10% of the meters in a group exceeding 102.0% accuracy (i.e., not fast requirement). If it is determined that fewer than 80% of the meters in a group meet the accuracy requirement or more than 10% of the meters in a meter group exceed the not fast requirement, corrective action will be taken.

Corrective action shall consist of either a selective removal program to raise the accuracy performance of the group to acceptable standards or the removal of the entire group from service. The rate of removal will be such that the required corrective action is completed as soon as practicable but not to exceed a period of two years after the year testing was performed. However, with Commission approval, the period for removal may be extended an additional two years in any year which the total number of meters required for removal exceeds four percent of the number of meters in the Statistical Sample Program.

For further details, a copy of the Statistical Sample Program can be obtained by writing to the Manager, Measurement, c/o Cascade Natural Gas Corporation, 8113 W. Grandridge Blvd, Kennewick, WA 99336.

#### **METER ACCURACY STANDARD**

Before being installed for customer use, meters whether new or reconditioned, will be in good order and be adjusted to register correct consumption with an accuracy bandwidth of two percent (2%) fast or slow.

(continued)

(K) Text formerly on Sheet No. 8.1 is found on Sheet No. 8.2.

(N)

First Revision of Sheet No. 8.2

Canceling

Original Sheet 8.2

P.U.C. OR. No. 10

# RULE 8 METER TESTING

## **METER SAMPLE PROGRAM (continued)** (T) (N) Meters with capacities up to 3000 cfh that have been in service ten (10) or more years as established by last set date shall be tested within a prescribed sample size. Sample size and family disposition will be determined in accordance with ANSI/ASQ Z1.4, ANSI/ASQ Z1.9, or other generally accepted industry (N) standard. Corrective action shall consist of either a selective removal program to raise the accuracy performance (M) of the group to acceptable standards or the removal of the entire group from service. The rate of removal will be such that the required corrective action is completed as soon as practicable but not to exceed a period of two years after the year testing was performed. However, with Commission approval, the period for removal may be extended an additional two years in any year which the total number of meters required for removal exceeds four percent of the number of meters in the Statistical (M) Sample Program. If meters tested in the fourth quarter of the plan year cause a family to require additional samples that (N) leave insufficient time to obtain the additional number of meters required to complete the sample, the company may elect to aggressive sampling in the following plan year so that a follow up determination is made within the first six months of the new plan year. The program year shall begin on January 1 and end on December 31 of the same year. Sample data collected during a given program year will be analyzed, and a decision regarding meter family disposition (N) will be made in the first quarter of the following calendar year. (D) (D) (D) (D) (M) Refers to language on Sheet No. 8.2 that was previously on Sheet No. 8.1. (N)

First Revision of Sheet No. 8.2

**Canceling** 

P.U.C. OR. No. 10 Original Sheet 8.2

# RULE 8 METER TESTING

### **METER TESTING CUSTOMER REQUESTED METER TESTING**METER SAMPLE PROGRAM (continued) (T) Meters with capacities up to 3000 cfh that have been in service ten (10) or more years as (N) established by last set date shall be tested within a prescribed sample size. Sample size and family disposition will be determined in accordance with ANSI/ASQ Z1.4, ANSI/ASQ Z1.9, or other generally accepted industry standard. (N) Corrective action shall consist of either a selective removal program to raise the accuracy performance (M) of the group to acceptable standards or the removal of the entire group from service. The rate of removal will be such that the required corrective action is completed as soon as practicable but not to exceed a period of two years after the year testing was performed. However, with Commission approval, the period for removal may be extended an additional two years in any year which the total number of meters required for removal exceeds four percent of the number of meters in the Statistical Sample Program. (M) If meters tested in the fourth quarter of the plan year cause a family to require additional samples that (N) leave insufficient time to obtain the additional number of meters required to complete the sample, the company may elect to aggressive sampling in the following plan year so that a follow up determination is made within the first six months of the new plan year. The program year shall begin on January 1 and end on December 31 of the same year. Sample data collected during a given program year will be analyzed, and a decision regarding meter family disposition will be made in the first quarter of the following calendar year. (N) Any customer may request the Company to test his/her meter. Company shall make such test at its (D) central meter shop within twenty (20) days of receipt of request and no payment or deposit will be required for such test. Should customer request a meter test more often than once in every twelve (12) month period, a Deposit (D) for Meter Test as established in Schedule 200 to cover the reasonable cost of the test may be required of the customer. The amount so deposited will be returned to the customer if the meter is found, upon test, to register more than two (2) percent fast. All meters will be tested in Company's central meter shop located in Yakima, Washington. A customer (D) shall have the right to require Company to conduct the test in his/her presence at Yakima, or if he/she so desires, in the presence of a representative appointed by him/her. A report giving customer's name, date of request, address of service location, the type, make, size and (D) meter number, the date tested, and result of test will be supplied to the customer within a reasonable time after completion of test.

CNG/O1<u>79</u>-0<u>24</u>-0<u>11</u> Issued <u>FebruaryApril</u> 2<u>85</u>, 201<u>79</u> Effective for Service on and after MarchMay 16, 20179

### **CASCADE NATURAL GAS CORPORATION**

	First Revision of Sheet No. 8.2
	Canceling
P.U.C. OR. No. 10	Original Sheet 8.2

(M) Refers to language on Sheet No. 8.2 that was previously on Sheet No. 8.1.